

## **A revision of the Habrocerinae of the world. Supplement II (Coleoptera: Staphylinidae)**

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**A revision of the Habrocerinae of the world. Supplement II (Coleoptera: Staphylinidae).** - Further data on the distribution of several species of *Habrocerus* Erichson and *Nomimocerus* Coiffait & Saiz are presented. *H. neglectus* sp. n. from southern Thailand, the sister species of *H. rougemonti* Pace, and *Nomimocerus septentrionalis* sp. n. from Chile, a close relative of *N. longispinosus* Assing & Wunderle, are described. Their primary and secondary sexual characters are figured.

**Key-words:** Coleoptera - Staphylinidae - Habrocerinae - Thailand - Chile - taxonomy - new species.

### INTRODUCTION

Before the present study, the two genera of Habrocerinae comprised 19 species worldwide, 14 species of *Habrocerus* Erichson and 5 species of *Nomimocerus* Coiffait & Saiz. *Habrocerus* is widely distributed in the Palaearctic, the Oriental, the Nearctic and the Neotropical region; the genus is absent from the Ethiopian region, and in the Australian region represented only by the probably introduced and widespread *H. capillaricornis* (Gravenhorst). *Nomimocerus*, in contrast, is confined to the Chilean subregion (ASSING & WUNDERLE 1995, 1996).

In the course of examining new *Habrocerus* material from Thailand it was discovered that what had previously been treated as *H. rougemonti* Pace in fact refers to two closely related species, one of them new to science and described below. An examination of previously unrevised and recently collected material of *Nomimocerus*, deposited in the collections of the University of Kansas, yielded a further species of *Nomimocerus*, so that the figure now stands at 21 species of Habrocerinae worldwide.

In addition to the descriptions, new faunistic data, which have become available since the first supplement (ASSING & WUNDERLE 1996), are presented.

Material from the following institutions and private collections was studied:

DEI	Deutsches Entomologisches Institut, Eberswalde (L. Zerche)
MHNG	Muséum d'histoire naturelle, Genève (I. Löbl)
UKNHM	University of Kansas Natural History Museum, Lawrence (J. S. Ashe, R. W. Brooks)
cAss	private collection, V. Assing
cWun	private collection, P. Wunderle

## NEW SPECIES AND RECORDS OF HABROCERINAE

### **Habrocerus capillaricornis** (Gravenhorst)

Canary Islands: 1♂, 4♀, Gran Canaria, N Teror, E Osorio, El Palmar, 600m, in shady barranco with fragments of Laurisilva, 20.XII.1997, leg. Assing & Wunderle (cWun).

United States of America: 1♂, 3♀, North Carolina, Watauga Co., Boone, 12.III./ 10.V./ 19.V.1973, leg. Ashe (UKNHM).

*H. capillaricornis* is here for the first time recorded from Gran Canaria. In the Canarian archipelago, the species was previously known only from Tenerife, La Palma and La Gomera. Numerous additional specimens from Central and Southern Europe and from Algeria were examined; the records are not listed in detail, as the species is very common in these regions.

### **Habrocerus pisidicus** Korge

Bosnia-Herzegovina: 3♂, 1♀, Bjelasnica planina (MHNG).

Bulgaria: 2♂, 2♀, Pirin, leg. Weirather (MHNG); 3♀, Ali Botusch, 'N-Seite' near Goleschowo, 1015m, 41°42'13N, 23°35'21E, *Fagus* wood, 15.VI.1997, leg. Behne (DEI); 1♂, Sredna Gora, S Koprivshtiza, 1110m, 42°35'12N 24°22'19E, *Fagus* wood, 29.VI.1997, leg. Zerche & Behne (cAss).

Greece: 1♂, 3♀, Crete, Zakros, 'Tal der Toten', 28.III.1973, leg. Fölscher & Meybohm (MHNG); 5♂, 4♀, Ródhos, M. Kariona, 400m, 11.IV.1977, leg. Besuchet (MHNG, cAss); 2♀, Ródhos, Petaloudes, 8.IV.1977, leg. Besuchet (MHNG).

*H. pisidicus* is widespread in the southeastern Mediterranean and has been known to occur in the regions indicated above.

### **Habrocerus ibericus** Assing & Wunderle

Spain: 2♂, 1♀, E. Asturias. Cibes, Sierra de la Serrantina, 800m, 16.V.1997, leg. Starke (coll. Feldmann, cAss); 1♀, Albacete, leg. Comellini (MHNG); 1♂, Prov. Albacete, Villaverde, 15.IV.1959, leg. Besuchet (MHNG); 1♂, Prov. Tarragona, Sierra de Moutsant (?), 23.III.1959, leg. Besuchet (MHNG); 1♂, 1♀, Prov. Lèrida, 2.VI.1965, leg. Comellini (MHNG); 2♂, 1♀, Prov. Teruel, Rubielos de Mora, 19.IX.1971, leg. Comellini (MHNG); 1♀, Prov. Murcia, Sierra de Espuña, 26.III.1959, leg. Besuchet (MHNG); 3♂, 1♀, Prov. Jaen, Sierra de Cazorla, 12.IV.1959, leg. Besuchet (MHNG).

Previously, only the type specimens of *H. ibericus* were known from the Iberian Peninsula, where the species seems to be both widely distributed and quite common.

**Habrocerus neglectus** sp. n.

Figs 1-4

*Habrocerus rougemonti* Pace: ASSING & WUNDERLE 1995 (partim, Figs 9a-g, 11g)

Holotype ♂: THAILAND. NE Bangkok, Khao Yai Nat. Park, Khao Khieo, 1150m, leg. Burckhardt &amp; Löbl, 28.XI.85 (MHNG).

Paratypes: 11♂, 19♀, same data as holotype (MHNG, cAss, cWun); 3♂, Chiang Mai, Mae Nang Kaeo, 900m, 54 km NE Chiang Mai, leg. Burckhardt &amp; Löbl, 3.XI.1985 (MHNG, cAss).

DIAGNOSIS: Closely related to and externally indistinguishable from *H. rougemonti* Pace, its sister species.♂: tergum and sternum VII slightly broader than in *H. rougemonti* (Fig. 3); modified sternum VIII anteriorly distinctly broader, less convex and mostly without median carina, posteriorly with wider emargination and more distinctly sclerotized margins (Fig. 2); internal sac with shorter row of semitransparent triangles and anteriorly with ca. four weakly sclerotized coniform spines (Fig. 1); appendices of pleurites VIII weakly S-shaped (see Fig. 9a in ASSING & WUNDERLE 1995).♀: tergum and sternum VIII broader and shorter than in *H. rougemonti* (Fig. 4).COMMENTS: For further details regarding external and secondary sexual characters, the description and figures in ASSING & WUNDERLE (1995) are referred to. Both the figures and the material listed from the surroundings of Bangkok refer to this species and not to *H. rougemonti*.DISTRIBUTION: *H. neglectus* is known only from two localities, one in northern and one in southeastern Thailand. It appears doubtful that *H. neglectus* and *H. rougemonti* should have a para- or allopatric distribution; both species are macropterous, and the northern locality of *H. neglectus* (Mae Nang Kaeo) is only some 70 km away from Doi Suthep, where *H. rougemonti* was found.**Habrocerus rougemonti** Pace

Figs 5 - 9

*Habrocerus rougemonti* Pace: ASSING & WUNDERLE 1995 (partim)

Additional material examined:

Thailand: 5♂, 1♀, mountains near Umphang, 1250 m, 10.II.1993, leg. Schwendinger (MHNG, cAss).

DIAGNOSIS: ♂: tergum and sternum VII slightly more oblong than in *H. neglectus* (Fig. 8); modified sternum VIII anteriorly more slender and more convex than in *H. neglectus* and with median carina, posteriorly with narrower emargination and relatively weakly sclerotized margins (Fig. 6); internal sac with longer row of semi-transparent triangles and anteriorly with a large blackish spine (Fig. 5); appendices of pleurites VIII weakly and evenly curved (Fig. 7).♀: terminalia similar to *H. neglectus*, but tergum and sternum VIII more oblong (Fig. 9).DISTRIBUTION: *H. rougemonti* appears to have a more restricted distribution than previously stated. So far, the species has become known from three localities in northern and western Thailand.

**Habrocerus schwarzi** Horn

Canada: 9♂, 4♀, Alberta, George Lake, 53°57'N, 114°06'W, ex mushrooms, 11./22.VIII.1977, leg. Ashe (UKNHM, cAss); 1♂, Alberta, Fort MacKay, aspen spruce, pitfall trap, 2.IX.1978, leg. Ryan & Hilchie (UKNHM).

Previously only one record from Alberta had been known (ASSING & WUNDERLE 1995).

**Habrocerus tropicus** Wendeler

1♀, Brazil, Linha Facao, Santa Catarina, V.1954, leg. Plaumann (UKNHM).

*H. tropicus* has become known only from Brazil.

**Nomimocerus longispinosus** Assing & Wunderle

Chile: 2♂, Chiloé, Isla Chiloé, San Juan de Chadmo, 20.II.1997, leg. Cekalovic (UKNHM, cAss); 2♀, 1 ex., Chiloé, Isla Chiloé, 5km SW Chonchi, 20.II.1997, leg. Cekalovic (UKNHM).

Previously recorded only from Aisén province, Chile, *N. longispinosus* is now also known from Isla de Chiloé, Chiloé province.

**Nomimocerus peckorum** Assing & Wunderle

Chile: 4♂, 4♀, Osorno, 14 km E Termas de Puyehue, 40°40'S, 71°14'W, 350 m, ex fungus-on live vine, 30.XI.1994, leg. Leschen & Carlton (UKNHM, cAss); 1♀, same data, but 450 m, ex sifting leaf litter (UKNHM); 1♂, 1♀, Valdivia, 10 km NW Choshuenco, 39°45'S, 72°20'W, 250 m, sifting leaf litter, 15.XI.1994, leg. Leschen & Carlton (UKNHM, cAss); 1♀, Valdivia, 37 km SE Panguipuli, 39°45'S, 72°20'W, 300 m, 14.XI.1994, leg. Leschen & Carlton (UKNHM); 1♂, Cautin, 8 km S Pucon, 1075 m, 39°21'S, 71°58'W, 23.XI.1994, leg. Leschen & Carlton (UKNHM); 1♂, Cautin, 26.7 km E Pucon, 625 m, 39°39'S, 71°47'W, 24.XI.1994, leg. Leschen & Carlton (UKNHM); 1♂, Cautin, Termas de Palguin, Salto Puma, 725 m, 39°22'S, 71°50'W, 25.XI.1994, leg. Leschen & Carlton (cAss).

*N. peckorum* was originally described from Osorno and Llanquihue province, Chile, and is here recorded from two further provinces: Valdivia and Cautin.

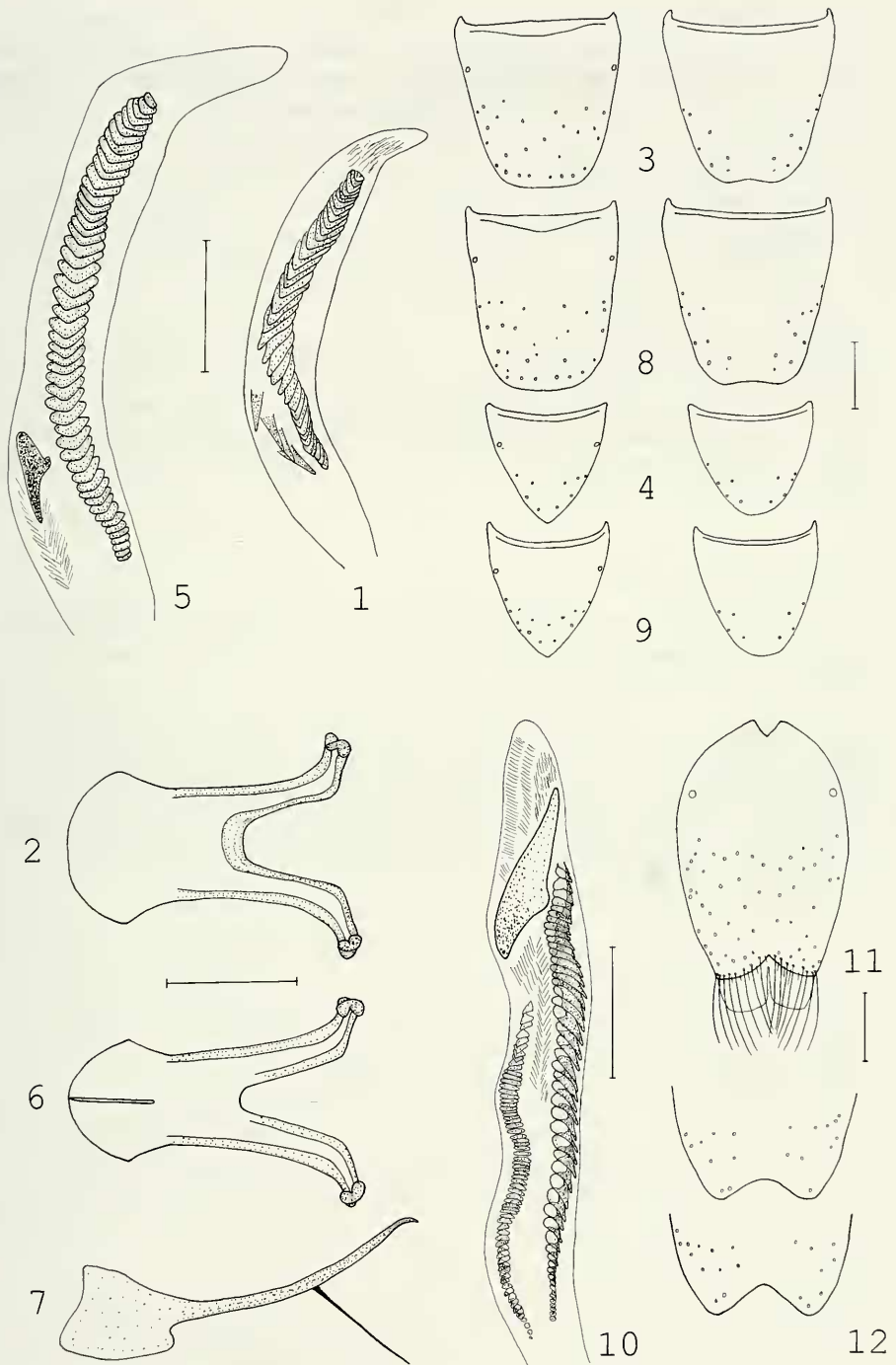
**Nomimocerus septentrionalis** sp. n.

Figs 10 - 12

Holotype ♂: CHILE: Coquimbo, 6 km SW Hurtado, 1040 m, Puente Morrillos, 30°16'S, 70°40'W, 28 Oct 1994, R. Leschen & C. Carlton, #021, ex: along stream (UKNHM).

Paratypes: 5♂, 3♀, same data as holotype (UKNHM, cAss); 6♂, 4♀, CHILE: Coquimbo, 850 m, 5 km S. Carén, Pte. El Cuiyano, Río Limari, 30°52'S, 70°45'W, #033, R. Leschen, C. Carlton, ex: leaf litter, 30.X.1994 (UKNHM, cAss); 2♂, 9♀ [2♀ teneral], CHILE: Coquimbo, 6 km W Hurtado, 1040 m, Puente Morrillos, 30°16'S, 70°40'W, 28 Oct 1994, R. Leschen & C. Carlton, #022, ex: sifting litter (UKNHM, cAss).

FIGS 1 - 12: *Habrocerus neglectus* sp. n. (1 - 4) and *H. rougemonti* Pace (5 - 9): internal sac in squeezed preparation (1, 5); outlines of ♂ sternum VIII (2, 6); appendix of ♂ pleurite VIII (7); ♂ tergum VII (left) and sternum VII (right) (3, 8); outlines of ♀ tergum VIII (left) and sternum VIII (right) (4, 9). *Nomimocerus septentrionalis* sp. n. (10-12): internal sac in squeezed preparation (10); ♂ tergum VII (11); outline of hind margin of sternum VII of two ♂ (12); setae and pubescence partly or completely omitted in 11 and 12. Scales: 0.25 mm.



DIAGNOSIS: Total length: 3.8 - 4.8 mm; pronotal length: 0.68 - 0.76 mm; pronotal width: 1.03 - 1.15 mm; elytral length: 0.71 - 0.80 mm. In external morphology and colour highly similar to *N. peckorum* and *N. longispinosus*, but on average larger (see measurements); hind wings in all the type specimens reduced.

♂: posterior margin of sternum VII with concavity of variable depth and width (Fig. 12); hind margin of tergum VII more deeply incised centrally than in *N. peckorum* and *N. longispinosus* (Fig. 11); internal sac with internal structures similar to *N. longispinosus*, but spines of long series stouter and caudad more gradually decreasing in length (in *N. longispinosus* the transition is ± abrupt), the second (short) series longer, and the sclerotized terminal piece distinctly more massive and less slender than in that species (Fig. 10).

DISTRIBUTION AND BIONOMICS: The species was collected near Coquimbo, Chile (between 30° and 31° southern latitude), distinctly further north (name!) than the known areas of distribution of its congeners. The type specimens were taken in leaf litter and in the vicinity of a stream at altitudes between 850 and 1040 m at the end of October; two of them were teneral.

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#### REFERENCES

- ASSING, V. & WUNDERLE, P. 1995: A revision of the species of the subfamily Habrocerinae (Coleoptera: Staphylinidae) of the world. *Revue suisse de Zoologie* 102: 307-359.
- ASSING, V. & WUNDERLE, P. 1996: A revision of the species of the subfamily Habrocerinae of the world. Supplement I. (Coleoptera: Staphylinidae). *Beiträge zur Entomologie* 46: 373-378.